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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/882,938	06/15/2001	Marius Goldenberg	75622.P0037	9456

22503 7590 07/31/2002

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EXAMINER

NGUYEN, KHANH V

ART UNIT PAPER NUMBER

2817

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/882,938

Applicant(s)

GOLDENBERG, MARIUS

Examiner

Khanh V. Nguyen

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-20 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 7-10 is/are rejected.
- 7) ☒ Claim(s) 2,4-6,11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figures 3 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant admitted PRIOR ART in view of Bruccoleri et al. (5,736,880).

Regarding claim 1, PROR ART (Fig. 4) discloses the claimed invention except a plurality of transconductors associated with each node (A or B).

Bruccoleri et al. (Fig. 6) disclose an amplifier circuit having a common mode rejection, wherein Figure 6 discloses a plurality of current generators (Gc1-Gc4) can be read as a plurality of transconductors associated to each node (A and B).

Accordingly, it would have been obvious in view of the references, taken as a whole, to have modified the circuit of PRIOR ART to have included an additional current source, as exemplarily taught by Bruccoleri et al. Such, as modification would have imparted the advantageous benefit of ensuring high speed and enhancing the precision of the circuit (see ABSTRACT) as taught by Bruccoleri et al., to PRIOR ART reference, thereby suggesting the obviousness of such a modification.

Regarding claim 3, wherein PRIOR ART discloses an adjustable transconductance (gB).

Regarding claim 7, each branch of Bruccoleri et al. circuit disclose two current sources which can be read as two transconductors.

Regarding claim 8, the transconductance value of the transconductor would have been obvious matter of design choice since it is result effective variable. Bruccoleri et al. also disclose that current generators (Gc1-Gc4) are of the same type.

Regarding claims 9, 10, Bruccoleri et al. implemented CMOS integrated circuit (see col. 5, lines 4-42).

Allowable Subject Matter

Claims 2, 4-6, 11, 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 13-20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2, no prior art teaches elements disclosed and further teaches the transconductors capable of being decoupled from its associated node and recoupled to a complementary node.

Regarding claims 4-6, 11, 12, no prior art teaches elements disclosed and a calibration engine varies each of the adjustable transconductances until a sensed differential voltage across the differential node pair is substantially zero.

Regarding claims 13-20, no prior art teaches the step disclosed and further step of adjusting at least one adjustable transconductor until a differential voltage across the differential node pair is substantially zero.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional reference (Cargill (5,668,468)) shows further analogous prior art circuitry (circuit having common mode rejection).

This art is deemed relevant and should be carefully reviews before any amendment is filed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (703) 306-9058. The examiner can normally be reached from 8:00 AM-5:00 PM.

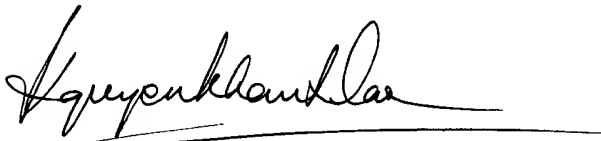
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service at (703) 872-9317.

NKV

07/25/02

A handwritten signature in black ink, appearing to read 'Nguyen Khanh Van', written over a horizontal line.

Nguyen, Khanh Van

Group 2800, Art Unit 2817